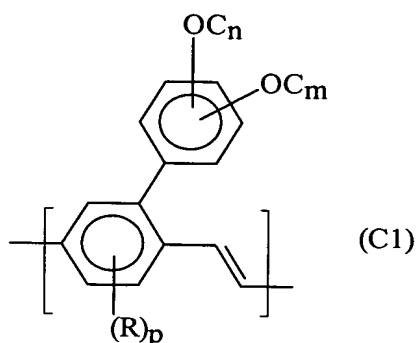


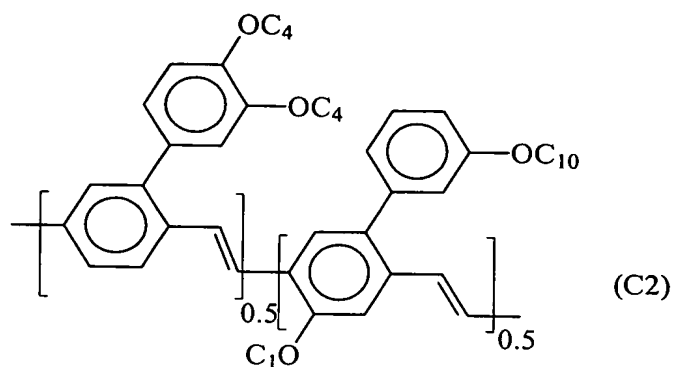
## CLAIMS:

1. Aryl-substituted poly-p-arylenevinylenes comprising a repeating unit of the formula (C1),



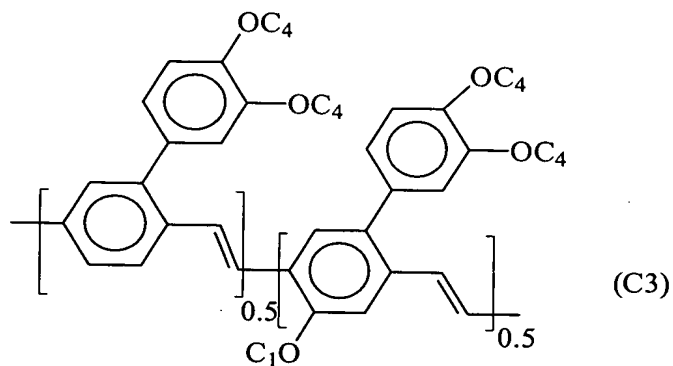
- in which one or more of the unsubstituted aromatic carbon atoms may be replaced by nitrogen atoms,  $-OC_m$  and  $-OC_n$  are alkoxy groups,  $m$  and  $n$  are integers from 2 to 6 with  $m + n = 8$ ,  $p$  is 0, 1, 2 or 3 and in which  $R$  is  $CN$ ,  $Cl$ ,  $F$ ,  $CF_3$ ,  $NO_2$ , or  $SO_3Z$  wherein  $Z$  is a monovalent cation such as  $Na^+$ , or in which  $R$  is  $-XR^1$  wherein the unit  $-X-$  represents a single bond,  $-O-$ ,  $-S-$ ,  $-CO-$ ,  $-COO-$ ,  $-OCO-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-N(R^2)-$  or  $-N(R^2)CO-$ , and wherein  $R^1$  and  $R^2$  are the same or different and constitute a straight-chain branched or cyclic  $C_1-C_{20}$  alkyl group or together an  $C_1-C_{20}$  alkylene group, in which  $C_1-C_{20}$  alkyl or  $C_1-C_{20}$  alkylene group one or more hydrogens are optionally substituted by  $F$  or a  $C_4-C_{12}$  aryl group and/or one or more non-adjacent  $-CH_2-$  units are optionally substituted by  $C_4-C_{12}$  arylene,  $-O-$ ,  $-S-$ ,  $-CO-$ ,  $-COO-$ ,  $-OCO-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-N(R^3)-$  or  $-N(R^3)CO-$  where  $R^3$  is  $C_1-C_{20}$  alkyl, or in which  $R$  is a  $C_4-C_{12}$  aryl group which may or may not be substituted.
2. Aryl-substituted poly-p-arylenevinylenes as claimed in claim 1 wherein  $m = n$ .
3. Aryl-substituted poly-p-arylenevinylenes as claimed in claim 1 or 2 wherein  $-OC_m$  and/or  $-OC_n$  is 2-methylpropyloxy.

4. Aryl-substituted poly-p-arylenevinylenes as claimed in claim 3 wherein the repeating unit (C1) is a 2-(3',4'-bis(2-methylpropyloxy)phenyl)-1,4-phenylene vinylene repeating unit.
5. Use of an aryl-substituted poly-p-arylenevinylene as claimed in any one of the claims 1 to 4 in an organic electroluminescent device.
6. Use as claimed in claim 5, wherein the organic electroluminescent device is operated such that the temperature of the device is at least 5 to 10 °C above room temperature.
7. An organic electroluminescent device comprising an aryl-substituted poly-p-arylenevinylene as claimed in any one of the claims 1-4.
8. An organic EL device as claimed in claim 7 capable of providing a service life of at least 45 to 200 h when driven at a constant current, at an initial brightness of 200 Cd/m<sup>2</sup>, and at an ambient temperature of 80 °C.
9. An organic EL device as claimed in claim 7 comprising a red to orange light emitting aryl-substituted poly-p-arylenevinylene and capable of providing a service life of at least 800 to 1200 h when driven at a constant current, at an initial brightness of 100 Cd/m<sup>2</sup>, and at an ambient temperature of 70 °C.
10. An organic electroluminescent device comprising an organic electroluminescent, charge-transport and/or charge-injecting layer consisting of a material which, at least at one temperature in the range of 100 to 200 °C, has a viscosity higher than or equal to the viscosity of an aryl-substituted poly-p-arylenevinylene as claimed in any one of the claims 1 to 4.
11. An organic electroluminescent device as claimed in claim 10 characterized in that the material from which the electroluminescent charge-transport and/or charge-injecting layer is made has, at least at one temperature in the range of 100 to 200 °C, a viscosity which is higher than or equal to the viscosity of the polymer of the repeating unit according to the formula (C2)



where  $-\text{OC}_{10}$  is 3,7-dimethylhexyloxy and  $-\text{OC}_4$  is 2-methylpropyloxy.

12. An organic electroluminescent device as claimed in claim 11 characterized in that the material from which the electroluminescent, the charge-transport and/or the charge-injecting layer is made has, at least at one temperature in the range of 100 to 200 °C, a viscosity which is higher than or equal to the viscosity of the polymer of the repeating unit according to the formula (C3)



where  $-\text{OC}_4$  is 2-methylpropyloxy.